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22nd Floor  
120 South Riverside Plaza  
Chicago, IL 60606-3913

EXAMINER

KORNAKOV, MICHAIL

ART UNIT	PAPER NUMBER
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1746

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DATE MAILED: 07/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

AS9

**Office Action Summary**

Application No.

09/890,943

Applicant(s)

URA, KIMASARU

Examiner

Michael · Komakov

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 May 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 1-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-26 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's response to restriction requirement and election of claims 14-26 for further prosecution on the merits is noticed in Paper No. 7, dated 05/06/2003. While the election is made with traverse, Applicant has failed to point out wherein either (1) the reasons advanced by the Examiner to establish distinctiveness between the inventions as claimed and grouped or (2) the evidence of separate status, classification and/or search are in error. Therefore the restriction requirement is made **FINAL**.

Claims 1-13 withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Claims 14-26 are examined on the merits.

### *Drawings*

2. The drawings are objected to because the reference character F', indicated on Fig.4, apparently should be designated as F1', which is recited on page 12 of the instant specification.

3. The drawings, Fig 1 and 3, are objected to because they do not correspond to the description of the instant invention, which requires the injection hole 10 to be larger than the other injection holes 11, 12 and 13 (see, for example, paragraph, bridging

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pages 10 and 11). Apparently, this structural feature is very important to the instant invention and should be properly illustrated.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

#### ***Information Disclosure Statement***

4. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." On page 1 of the instant disclosure Applicant relies on Japanese publications S55-20380, S49-37403, S54-110658. Applicant is kindly advised to submit these publications for consideration by the Examiner. Applicant's cooperation is highly appreciated.

#### ***Specification***

5. Claims 22 and 23 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

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Claims 22 and 23 respectively depend on claims 14 and 18, which recite a device for washing drain pipe. Claims 22 and 23 are respectively directed to specificities of high pressure water and fluid, which are utilized for the operation of such device and which do not represent or further limit the structural features of the said device.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 14-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 14-21 recite the transitional word "characterized in that". The transitional word (i.e. between the preamble and the body of claim) "characterized in" and phrases incorporating it are common in applications of foreign origin. In U.S. practice claims containing those words and phrases are rejectable under 35 U.S.C. 112, second paragraph, when characterization may connote more than mere description (dictionary definition); in scientific parlance characterization may imply one or more physical steps or procedures (e.g. structure determination, elemental analysis, or qualitative tests) to identify a product. Since it is rare that applicant intends more than a mere description when using this language, physical steps are rarely disclosed. As such the reader may be unsure about the meaning of the wording of the claims, and additionally **the scope of the claim is often unclear** ("characterized conveys no degree of openness). Usually

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these troublesome words or phrases can be replaced by the standard transitional words, "having", "comprising", "wherein" and the like.

The recited in claims 14-21 "...a certain injection hole. . .to always be in opposition to the inner peripheral surface of pipe..." constitutes an indefinite subject matter, because as illustrated by Fig.3-11 each of holes 10-13 is positioned inside the pipe and always opposes the inner peripheral surface of said pipe. Apparently, a certain hole is always positioned closer or pushed to the inner surface of the pipe compare to the distance between the other holes and the inner peripheral surface of the pipe. Clarification is required.

The recited in claims 14-21 "provision is made for causing the nozzle to turn in a spiral manner...in conjunction with turning and feeding out the high pressure hose" constitutes an indefinite subject matter, because it is not clear whether the processing step, which is required for device operation or a specific structural limitation of the device, which causes certain action, is disclosed. Clarification is required.

### ***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claim 14, 18, 23, 24 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 7-55308.

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JP'308 discloses device for cleaning inside surfaces of pipes, the said device comprises a high pressure hose (2); a pressure bearing device (3), which connects the high pressure hose with nozzle (8); a nozzle (8), positioned at the leading end of high pressure hose, the said nozzle having injection holes 9, oriented rearward relative to the moving direction of the nozzle (Fig. 2), wherein the diameter of one hole (9a) (reads on "a certain injection hole", as instantly claimed) is larger than diameters of other injection holes (9b, 9c, 9d, as shown in Fig. 4). JP'308 indicates that due to the difference in diameters of injection holes unbalanced propelling force is generated while supplying the nozzle with high pressure water, which pushes the nozzle against the wall and causes rotation the nozzle and the hose (Fig. 6; col.3, lines 21-27; col. 4, lines 8-34; col.5, lines 10-14). With regard to the limitation that "the jetting medium is constituted by a mixture of water and air", since JP'308 discloses the use of regular pressurized water, such water inherently contains air.

Therefore, all **the structural limitations** of washing device, disclosed in the instant claim 1 are explicitly or inherently met by JP'308.

### ***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 7-55308 in view of JP 08187472.

JP'308 remains silent about the use of hot water for washing pipes. However, the cleaning/washing of drain pipes with hot water is widely utilized. Thus, JP'472 indicates the use of pressurized hot water, heated in the boiler, for cleaning pipes (see Abstract).

Because both JP'308 and JP'472 are concerned with cleaning pipes, utilizing pressurized water and JP'472 indicates the use of hot water, one skilled in the art at the time the invention was made, motivated by the teaching of JP'472, would have found it obvious to utilize the hot water in order to enhance cleaning of drain pipes utilizing the device of JP'308 with the reasonable expectation of success.

13. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 7-55308.

JP'308 remains silent about having a reference line on the surface of high pressure hose, thus indicating position of the certain injection hole. However, the device of JP'308 comprises different structural elements, which have to be sequentially assembled for proper functioning. Therefore, the skilled artisan would have found it



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obvious to mark these structural elements, among them the nozzle with jet of larger diameter, and utilize such marking as a reference guide in order to provide proper assembling of device of JP'308.

***Allowable Subject Matter***

14. Claims 15, 16, 17, 19, 20 and 21 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

15. The following is a statement of reasons for the indication of allowable subject matter: while teaching pipe cleaning device with structural elements, similar to those instantly claimed, JP'308 fails to anticipate or suggest fairly the structure of the nozzle, wherein the jets are positioned at certain angle with respect to each other, as recited in the instant claims 15, 16, 17, 19 and 20. Such nozzle structure has not been located at the date of this Office Action.

16. Applicant should note that additional prior art, cited in PTOL-892, shows the general state of the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Kornakov whose telephone number is (703) 305-0400. The examiner can normally be reached on 9:00am - 5:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (703) 308-4333. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872 9310 for regular communications and (703) 872 9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 2450.

*M. Kornakov*

Michael Kornakov  
Examiner  
Art Unit 1746

July 21, 2003